

ABSTRACT

There is disclosed an ink jet printhead which comprises a plurality of nozzles unit cells 1 and one or more heater elements 10 corresponding to each nozzle 3. Each heater element 10
5 is configured to heat a bubble forming liquid 11 in the printhead to a temperature above its boiling point to form a gas bubble 12 therein. The generation of the bubble 12 causes the ejection of a drop 16 of an ejectable liquid (such as ink) through an ejection aperture 5 in each nozzle 3, to effect printing. The nozzle unit cells 1 are manufactured using semiconductor and micro mechanical techniques such that the spacing between adjacent
10 nozzle apertures 5 in the printhead is less than 100 microns.

With the use of semiconductor and micro mechanical manufacturing techniques, the dimension of the nozzles structures can be kept relatively small without significant increases in manufacturing costs. Therefore, the nozzle density in the printhead can be
15 increased for greater printing resolution.